

## C l a i m s :

1. A conveyor pan for face conveyors in underground mining systems, in particular coal minings systems, with outward race and return race to guide a scraper chain, between which a conveyor bottom is disposed, with on the goaf side and on the wall side securing means located at the conveyor pan ends for a connecting component to link adjacent conveyor pans together, preferably with guide means for a mining machine which may be moved along the wall and with a static loading ramp connected to the conveyor pan on the wall side and extending from the floor to the level of the outward race, by means of which muck may be loaded into the outward race as the face conveyor is advanced, **characterized in that** the loading ramp consists of a curved or in particular angled guide plate (50), the lower section (51) of which is steeper relative to the floor (11) or to the conveyor bottom (9) than its upper section (52).
2. The conveyor pan as recited in Claim 1, **characterized in that** the apex line (53) of the curve or bend of the guide plate (50) is disposed at the level of the conveyor bottom (9), preferably between the middle and the underside of the conveyor bottom (9).
3. The conveyor pan as recited in Claim 1 or 2, **characterized in that** the apex line (53) of the curve or bend of the guide plate (50) is located below the articulation point of the advancing system or pusher beams disposed on the goaf side for moving the face conveyor.

4. The conveyor pan as recited in one of Claims 1 to 3, **characterized in that** the lower section (51) and the upper section (52) of angled guide plate (50) are essentially flat and include an angle ( $\alpha$ ) of approximately  $150^\circ$ - $170^\circ$ , preferably approximately  $160^\circ \pm 4^\circ$ .
5. The conveyor pan as recited in one of Claims 1 to 4, **characterized in that** the lower section (51) is inclined relative to the conveyor bottom (9) by an angle ( $\beta$ ) of approximately  $65^\circ$ - $85^\circ$ , preferably  $78^\circ \pm 4^\circ$ , and the upper section (52) is inclined relative to the conveyor bottom (9) by an angle ( $\gamma$ ) of approximately  $45^\circ$ - $65^\circ$ , preferably  $55^\circ \pm 4^\circ$ .
6. The conveyor pan as recited in one of Claims 1 to 5, **characterized in that** the guide plate (50) is equipped at the conveyor pan ends (19, 20) with recesses (54, 55), the size of which is matched to the dimensions of the securing means and/or conveyor pan-connecting component.
7. The conveyor pan as recited in one of Claims 1 to 6, **characterized in that** the securing means consist of toggle bolt sockets (21, 22) and the conveyor pan-connecting components consist of toggle bolts, the toggle heads of which can be engaged in the toggle bolt sockets (21, 22).
8. The conveyor pan as recited in one of Claims 1 to 7, **characterized in that** the lower section (51) of the guide plate (50) forms a bar (60) at the lower edge, which extends as far as the conveyor pan ends (19, 20).

9. The conveyor pan as recited in one of Claims 6 to 8, **characterized in that** the limiting wall (54', 55') of the recess (54, 55) is equipped with a detent (62, 63) parallel to the conveyor pan ends (19, 20).
10. The conveyor pan as recited in one of Claims 1 to 9, **characterized in that** the guide plate (50) is welded to the conveyor pan (10).
11. The conveyor pan as recited in one of Claims 1 to 10, **characterized in that** the lower section (51) of the guide plate (50), in particular the bar (60) at its lower edge, is welded to a sliding bar (26) on the wall side or to a machinery guide for the mining machine.
12. The conveyor pan as recited in one of Claims 1 to 11, **characterized in that** the upper section (52) of the guide plate (50) is welded to the underside or front face (29) of the horizontal web (17) of an approximately T-shaped or L-shaped and in particular rolled steel side section (3).
13. The conveyor pan as recited in one of Claims 1 to 11, **characterized in that** the conveyor pan features a removable trough as the outward race and the upper section of the guide plate is welded to the frame holding the removable trough.
14. The conveyor pan as recited in one of Claims 1 to 13, **characterized in that** in the center area of the guide plate (50), and preferably in the middle, a hole for a lifting hook (61) is provided.

15. The conveyor pan as recited in one of Claims 1 to 14, **characterized in that** at least two support plates (30, 32) are disposed between the guide plate (50) and the side wall on the wall side and/or the side sections of the outward race and/or return race.
16. The conveyor pan as recited in Claim 15, **characterized in that** the guide plate (50) has vertical slots (58, 59) at the level of the support plates (30, 32).
17. The conveyor pan as recited in one of Claims 1 to 16, **characterized in that** guide means for a cutting mining machine, in particular a drum cutter-loader, are provided with the horizontal web (17) of the outward race (1)'s side section (3) on the wall side preferably forming the wall-side guide for the drum cutter-loader.